

# THE CAMBRIDGE STATISTICS DISCUSSION GROUP

**Wednesday 27th November 2002 7:15 for 7:45**

The Statistical Laboratory,  
Centre for Mathematical Sciences,  
Wilberforce Road, Cambridge

## **Bristol, Shipman and in-vitro fertilisation clinics: how can we spot the odd one out?**

**David Spiegelhalter**  
M.R.C. Biostatistics Unit,  
Cambridge

**Abstract:** Recent high-profile cases have focused attention on the problems of prospective monitoring of health outcomes, while the debate about performance indicators and 'league tables' looks set to continue for a long time.

If we are mainly interested in early detection of 'sore thumbs', statistical methods with a background in quality control can be adapted to the clinical context. In this talk we shall see what would have happened, for example, had risk-adjusted sequential probability ratio tests been prospectively applied in the contexts of Bristol and Shipman.

However, more subtle methods are required if we are seriously interested in ranking the bulk of institutions, and these will be illustrated with 5-year performance of IVF clinics.

**Speaker:** David Spiegelhalter has worked at the MRC Biostatistics Unit in Cambridge for over 20 years, much of that time being spent in developing and applying Bayesian methods in health care. His current interests include complex Bayesian modelling using MCMC, model criticism, and the analysis of performance indicators in the NHS. He was one of the lead statistical witnesses in the Bristol Royal Infirmary Inquiry, and has advised the solicitors representing the families of Shipman's victims.

**Directions:** The main entrance is reached from Clarkson Road by going along the footpath to the right of the Newton Institute, and turning left through the gatehouse towards the main building (Pavilion A), which has a glass front and a curved grassed roof. The main entrance is in the middle of the glass front. Coffee before the talk will be in the common room in Pavilion D, and the talk will be in Meeting Room 5 in Pavilion A.. Free Parking is available after 5pm on Clarkson and Wilberforce Roads.

### **Provisional Next Meetings: (2003)**

3rd February – Christine Fletcher (AMGEN) on 'Challenges Faced In The Pharmaceutical Industry: A Biostatistics Perspective'.

4th March – Tim Sparks (Centre for Ecology & Hydrology) on 'The Influence of a Warming Climate on the Phenology of Plants and Animals'.

7th May – Peter Wadhams (Scott Polar) on 'Statistical Properties of Sea Ice Thickness - is the Arctic Ice Disappearing?'

**Supper:** Some members eat before a talk at the University Centre meeting in the downstairs bar at 6pm. All welcome !

**Subscriptions:** of 4 pounds per member are now due for the 2002-2003 session. Cheques should be made payable to Margaret Ely and may be posted to the secretary at the address below.

**Secretary:** Peter Watson, MRC Cognition and Brain Sciences Unit, 15 Chaucer Road, Cambridge CB2 2EF;  
telephone 01223 355294 Extension 801; E-mail [peter.watson@mrc-cbu.cam.ac.uk](mailto:peter.watson@mrc-cbu.cam.ac.uk)

## Approved Minutes of Annual General Meeting 2000-2001

The Annual General Meeting for the year 2000-2001 was held at the Cognition and Brain Sciences Unit, Chaucer Road, Cambridge on 8th October 2001. Present: Dave Andrews(in chair), Tim Auton, Luisa Bernardinelli, John Dickens, Mary Garratt, Sarah Godward, Ted Harding, Neil Hawkins, Mark Hill, Donna Jefferies, Tony Johnson, Krys Kelly, Rob Milroy, Pamela Morris, Ian Nimmo-Smith, Karen Ooms, Gill Price, Lisa Robertson, Peter Rothery, Tim Sparks, Mike Streather, Susan Talbot, Simon Thompson, Peter Treasure, Sarah Vowler, Peter Watson, Graham Wetherill. Apologies: Margaret Corbett, Helen Tate, Nicola Wright. The **minutes** of the previous A.G.M. were approved. **Reports:** The **Treasurer's** Accounts were presented. It was agreed to keep subscriptions at £4. The **Secretary** reported median (12) and total attendance (97) were consistent with previous years. **Election of officers and committee:** The committee were re-elected unopposed. The committee for 2001-2002: *chair* Dave Andrews; *secretary* Peter Watson; *treasurer* Rob Milroy; *officio* Eryl Shirley; *ordinary* Margaret Corbett, Tim Sparks, Helen Tate.

**Any Other Business:** It was agreed that **any members on the postal list who don't mind being e-mailed their notices instead should please contact the secretary.**

### Treasurer's Accounts and Report 2001-2002

Expenditure	2001-02	2000-01	Income	2001-02	2000-01
Cancer Research	£10.00	N/A	Initial cash balance	£176.64	£154.44
Secretarial	£45.68	£69.39			
Speakers' expenses	£14.04	£25.15	Subscriptions (No. of people)	£136.00 (34)	£120.00 (30)
Refreshments	£38.36	£ 6.06			
Secretary -in hand c/f	£89.67	£61.75			
Bank account c/f	£117.76	£114.89	Interest	£2.87	£2.80
Totals	£315.51	£277.24		£315.51	£277.24

**Acting Treasurer's Report:** There is no immediate need to change the annual subscription of £4. I would recommend however that the Group authorises the incoming Treasurer to set the 2003-4 subscription between £3 and £5 inclusive, at their discretion. A sum of £117-76 is still tied up in the estate of Rob Milroy but doesn't affect the current good position. Group members may not be aware that subscriptions collected at the last two meetings of the year have been deemed to expire at the end of the following year. This practice has arisen informally to ease the collection of subscriptions at those meetings. The Group may like to endorse this policy at the Annual General Meeting.

### Draft Minutes of Annual General Meeting 2001-2002

The Annual General Meeting for the year 2001-2002 was held at the Cognition and Brain Sciences Unit, Chaucer Road, Cambridge on 7th October 2002. Present: Dave Andrews(in chair), Saghir Bashir, Margaret Corbett, John Dickens, Margaret Ely, Mary Garratt, Ted Harding, Ian MacPherson, Pamela Morris, Haidee Philpott, Eryl Shirley, Helen Tate, Peter Treasure, Jamie Tunks, Peter Watson, Graham Wetherill. The **minutes** of the previous A.G.M. were circulated and approved. **Reports:** The **Treasurer's** Accounts were presented. It was agreed to keep subscriptions at £4 and any subscriptions received at the last two meetings of the year were deemed to expire at the end of the following year. The **Secretary** reported attendance was consistent with previous years. **Election of officers and committee:** Ted Harding was proposed and seconded as chair and Margaret Ely as Treasurer. Both were elected unopposed. The committee for 2002-2003: *chair* Ted Harding; *secretary* Peter Watson; *treasurer* Margaret Ely ; *officio* Dave Andrews; *ordinary* Margaret Corbett, Tim Sparks, Helen Tate. Dave Andrews was thanked by Ted for his effective contribution during his period as chair and Peter Treasure for assuming the role of acting treasurer. **Any Other Business:** None.